

Remarks

Claims 1-42 were pending in this application before this Amendment C. Claims 1-40 stand rejected. Claims 1, 2, 5-8, 11-14, 17, 18, 20-25, 28, 29, 32, 33, and 38-40 have been cancelled, without prejudice. Claims 4, 10, 15, 16, 19, 27, 30, 34, 35, 36 and 37, submitted herewith, in Appendix A, is a Submission of Marked Up Claims, in accordance with 37 C.F.R. §1.121. Claims 41 and 42 are newly added. No additional fee is due for newly added Claims 41 and 42.

Applicants respectfully request reconsideration of the rejection of claims 1-3, 5-9, 11-26, and 28-40 under 35 U.S.C. §102(b) as anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over Anderson (U.S. Patent No. 4,244,362).

Claims 1 and 2 have been cancelled, without prejudice.

With respect to claim 3, this claim requires that the magnet on the distal end "comprises a flexible magnetic material forming the distal end section of the guide wire". The Office Action states that "the magnetic material is inherently flexible with regard to other materials". Applicants do not understand this comment. Magnetic materials are typically metal or ceramic, and thus not flexible, i.e., they cannot flex significantly in response to an applied magnet field. Flexible magnetic materials have been made by combining magnetic materials and flexible materials. The use of a flexible magnetic material in the distal portion of a guide wire, allows the distal portion of the guide wire to be shaped by an externally applied magnetic field, as shown in Figs. 13 and 13A, and described on page 14, lines 10 through 26. Anderson neither describes nor suggests using such a material in a guide wire. For at least this reason, the rejection of claim 3 under 35 U.S.C. §102(b) and 35 U.S.C. §103 should be withdrawn.

Claim 4 depends directly from claim 3. When the recitations of Claim 4 are considered in combination with the recitations of claim 3, Applicants submit that claim 4 is likewise patentable over Anderson.

Claims 5-8 have been cancelled, without prejudice.

With respect to claim 9, this claim requires that the magnet on the distal end "comprises a flexible magnetic material forming the distal end section of the guide wire". The Office Action states that "the magnetic material is inherently flexible with regard to other materials". As stated above, Applicants do not understand this comment. Magnetic materials are typically metal or ceramic, and thus not flexible, i.e., they cannot flex significantly in response to an applied magnet field. Flexible magnetic materials have been made by combining magnetic materials and flexible materials. The use of a flexible magnetic material in the distal portion of a guide wire, allows the distal portion of the guide wire to be shaped by an externally applied magnetic field, as shown in Figs. 13 and 13A, and described on page 14, lines 10 through 26. Anderson neither describes nor suggests using such a material in a guide wire. For at least this reason, the rejection of claim 9 under 35 U.S.C. §102(b) and 35 U.S.C. §103 should be withdrawn.

Claim 10 depends directly from claim 9. When the recitations of claim 10 are considered in combination with the recitations of claim 9, Applicants submit that claim 10 is likewise patentable over Anderson.

Claims 11-14 have been cancelled, without prejudice.

With respect to claim 15, this claim requires that the magnet on the distal end "comprises a flexible magnetic material forming the distal end section of the guide wire". The Office Action states that "the magnetic material is inherently flexible with regard to other materials". As stated above, Applicants do not understand this comment. Magnetic materials are typically metal or ceramic, and thus not flexible, i.e., they cannot flex significantly in response to an applied magnet field. Flexible magnetic materials have been made by combining magnetic materials and flexible materials. The use of a flexible magnetic material in the distal portion of a guide wire, allows the distal portion of the guide wire to be shaped by an externally applied magnetic field, as shown in Figs. 13 and 13A, and described on page 14, lines 10 through 26. Anderson neither describes nor suggests using such a material in a guide wire. For at least this reason,

the rejection of claim 15 under 35 U.S.C. §102(b) and 35 U.S.C. §103 should be withdrawn.

With respect to claim 16, this claim requires the use of a guide wire having a magnetic distal tip comprising “a plurality of magnets secured on the distal end section of the guide wire in spaced apart relation allowing the guide wire to assume a shape under control of the magnetic field” and “applying a magnetic field to shape the magnetic distal tip in the desired configuration to the orient the magnetic tip in the desired direction of travel”. Anderson neither describes nor suggests a method of navigating a medical device through a body lumen using a guide wire having a plurality of magnets secured on the distal end in a spaced apart relation, thereby allowing the guide wire to be shaped under control of a magnetic field. Rather, Anderson employs a magnetic gradient to attract a magnet on a medical device, and does not use magnetic field lines to shape the magnetic medical device. Additionally, Anderson neither teaches nor suggests a plurality of magnets secured on the distal and section of the guide wire in a spaced apart relation. In contrast, Anderson teaches away from a plurality of magnets in a spaced apart relation by describing a series of small magnets that do not totally part from each other because of the force exerted between them. For at least these reasons, the rejection of claim 16 under 35 U.S.C. §102(b) and 35 U.S.C. §103 should be withdrawn.

Claims 17 and 18 have been cancelled, without prejudice.

Claim 19 depends directly from claim 15, which has been shown above to be
patentable over Anderson. When the recitations of claim 19 are considered in combination with the recitations of claim 15, Applicants submit that claim 19 is likewise patentable over Anderson.

Claims 20-25 have been cancelled, without prejudice.

With respect to claim 26, this claim requires that the magnet on the distal end “comprises a flexible magnetic material forming the distal end section of the guide wire”. The Office Action states that “the magnetic material is inherently flexible with regard to

other materials". As stated above, Applicants do not understand this comment. Magnetic materials are typically metal or ceramic, and thus not flexible, i.e., they cannot flex significantly in response to an applied magnet field. Flexible magnetic materials have been made by combining magnetic materials and flexible materials. The use of a flexible magnetic material in the distal portion of a guide wire, allows the distal portion of the guide wire to be shaped by an externally applied magnetic field, as shown in Figs. 13 and 13A, and described on page 14, lines 10 through 26. Anderson neither describes nor suggests using such a material in a guide wire. For at least this reason, the rejection of claim 26 under 35 U.S.C. §102(b) and 35 U.S.C. §103 should be withdrawn.

With respect to claim 27, this claim includes a guide wire magnetic distal tip comprising "a plurality of magnets on the distal end section of the guide wire in spaced apart relation". Anderson neither describes nor suggests a guide wire having a plurality of magnets secured on the distal end in a spaced apart relation. Rather, Anderson teaches away from a plurality of magnets in a spaced apart relation by describing a series of small magnets that do not totally part from each other because of the extreme force exerted between them. For at least this reason, the rejection of claim 27 under 35 U.S.C. §102(b) and 35 U.S.C. §103 should be withdrawn.

Claims 28 and 29 have been cancelled, without prejudice.

Claim 30 depends directly from claim 26, which has been shown above to patentable over Anderson. When the recitations of claim 30 are considered in combination with the recitations of claim 26, Applicants submit the claim 30 is likewise patentable over Anderson.

Claims 31-33 have been cancelled, without prejudice.

With respect to claim 34, this claim requires the use of a guide wire having a magnetic distal tip comprising "a plurality of magnets secured on the distal end section of the guide wire in spaced apart relation". Anderson neither describes nor suggests a method of navigating a medical device through a body lumen using guide wire having a

plurality of magnets secured on the distal end in a spaced apart relation. Rather, Anderson teaches away from using a guide wire having a plurality of magnets in a spaced apart relation by describing a series of small magnets that do not totally part from each other because of the extreme force exerted between them. For at least this reason, the rejection of claim 27 under 35 U.S.C. §102(b) and 35 U.S.C. §103 should be withdrawn.

Claims 35-37 depend directly from claim 34. When the recitations of claims 35-37 are considered in combination with the recitations of claim 34, Applicants submit that claims 35-37 are likewise patentable over Anderson.

Claims 38-40 have been cancelled, without prejudice.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection and the alternative Section 103 rejection of claims 1-3, 5-9, 11-26, and 28-40 be withdrawn.

Applicants respectfully request reconsideration of the rejection of claims 4, 10, and 27 under 35 U.S.C. §103(a) as being unpatentable over Anderson (U.S. Patent No. 4,244,362).

With respect to claim 4, claim 4 depends directly from claim 3. Claim 3 requires that the magnet on the distal end "comprises a flexible magnetic material forming the distal end section of the guide wire". The Office Action states that "the magnetic material is inherently flexible with regard to other materials". As stated above, Applicants do not understand this comment. Magnetic materials are typically metal or ceramic, and thus not flexible, i.e., they cannot flex significantly in response to an applied magnet field. Flexible magnetic materials have been made by combining magnetic materials and flexible materials. The use of a flexible magnetic material in the distal portion of a guide wire, allows the distal portion of the guide wire to be shaped by an externally applied magnetic field. Anderson neither describes nor suggests using such a material in a guide wire. Additionally, Applicants submit that, in view of Anderson, it would not have been an obvious design choice to construct a guide wire

magnetic distal end comprised of flexible magnetic material. Obviousness cannot be established by merely suggesting it would have been obvious to one of ordinary skill in the art to have selected an alternative design choice. Furthermore, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such a reference fairly suggest to one of ordinary skill in the art.

For at least these reasons, Applicants submit that claim 3 is patentable over Anderson. When the recitations of claim 4 are considered in combination with the recitations of claim 3, Applicants submit that claim 4 is likewise patentable over Anderson.

With respect to claim 10, claim 10 depends directly from claim 9. Claim 9 requires that the magnet on the distal end "comprises a flexible magnetic material forming the distal end section of the guide wire". The Office Action states that "the magnetic material is inherently flexible with regard to other materials". As stated above, Applicants do not understand this comment. Magnetic materials are typically metal or ceramic, and thus not flexible, i.e. they cannot flex significantly in response to an applied magnet field. Flexible magnetic materials have been made by combining magnetic materials and flexible materials. The use of a flexible magnetic material in the distal portion of a guide wire, allows the distal portion of the guide wire to be shaped by an externally applied magnetic field. Anderson neither describes nor suggests using such a material in a guide wire. Additionally, Applicants submit that, in view of Anderson, it would not have been an obvious design choice to construct a guide wire magnetic distal end comprised of flexible magnetic material. Obviousness cannot be established by merely suggesting it would have been obvious to one of ordinary skill in the art to have selected an alternative design choice. Furthermore, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such a reference fairly suggest to one of ordinary skill in the art.

For at least these reasons, Applicants submit that claim 9 is patentable over Anderson. When the recitations of claim 10 are considered in combination with the recitations of claim 9, Applicants submit that claim 10 is likewise patentable over Anderson.

With respect to claim 27, this claim includes a guide wire magnetic distal tip comprising "a plurality of magnets on the distal end section of the guide wire in spaced apart relation". Anderson neither describes nor suggests a guide wire having a plurality of magnets secured on the distal end in a spaced apart relation. Rather, Anderson teaches away from a plurality of magnets in a spaced apart relation by describing a series of small magnets that do not totally part from each other because of the extreme force exerted between them. Additionally, Applicants submit that in view of Anderson it would not have been an obvious design choice to construct a guide wire magnetic distal tip including a plurality of magnets in a space apart relation. Obviousness cannot be established by merely suggesting it would have been obvious to one of ordinary skill in the art to have selected an alternative design choice. Furthermore, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such a reference fairly suggest to one of ordinary skill in the art. For at least these reasons, Applicants submit that claim 27 is patentable over Anderson.


For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of claims 4, 10, and 27 be withdrawn.

New claim 41 depends directly claim 16, which has been shown above to patentable over Anderson. When the recitations of claim 41 are considered in combination with the recitations of claim 16, Applicants submit that claim 41 is likewise patentable over Anderson.

New claim 42 depends directly from claim 27, which has been shown above to patentable over Anderson. When the recitations of claim 42 are considered in combination with the recitations of claim 27, Applicants submit that claim 42 is likewise patentable over Anderson.

In view of the foregoing amendments and remarks, all the claims now pending in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "B. K. Wheelock", written over a horizontal line.

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APPENDIX A

ATTACHMENT FOR CLAIM AMENDMENTS

4. (Thrice Amended) The guide wire according to claim [1] 3 wherein the magnet on the distal end comprises a plurality of magnets on a distal end section of the guide wire in spaced apart relation allowing the guide wire to assume a shape under control of the magnetic field.

10. (Thrice Amended) The combination according to claim [7] 9 wherein the magnet on the distal end comprises a plurality of magnets on a distal end section of the guide wire in spaced apart relation allowing the guide wire to assume a shape under control of the magnetic field.

15. (Thrice Amended) A method of navigating a medical device through a body lumen to a desired location within the body, the method comprising:

providing a medical device having a lumen therethrough, the lumen having a proximal end and a distal end;

inserting a guide wire having a proximal end and a magnetic distal tip, the distal tip of the guide wire being made from a flexible magnetic material, through the lumen of the device until at least a portion of the magnetic distal tip extends distally beyond the distal end of the lumen in the medical device;

inserting the medical device and guide wire into a lumen in the body;

navigating the medical device through the lumen in the body by applying a magnetic field to orient the magnetic tip in the desired direction of travel;

advancing the guide wire in the direction in which the magnetic tip is oriented;
and

advancing the medical device over the guide wire; wherein the magnetic tip of the guide wire comprises a distal section of the guide wire being made from a flexible magnetic material.

16. (Twice Amended) [The method according to claim 13 wherein the magnetic tip of the guide wire comprises] A method of navigating a medical device through a body lumen to a desired location within the body, the method comprising:

providing a medical device having a lumen therethrough, the lumen having a proximal end and a distal end;

inserting a guide wire, having proximal end and a magnetic distal tip comprising a plurality of magnets secured on the distal end section of the guide wire in spaced apart relation allowing the guide wire to assume a shape under control of the magnetic field, through the lumen of the device until at least a portion of the magnetic distal tip extends distally beyond the distal end of the lumen in the medical device;

inserting the medical device and guide wire into a lumen in the body;

navigating the medical device through the lumen in the body by applying a magnetic field to shape the magnetic distal tip in the desired configuration to the orient the magnetic tip in the desired direction of travel;

advancing the guide wire in the direction in which the magnetic tip is oriented;
and

advancing the medical device over the guide wire.

19. (Amended) The method according to claim [13] 15, wherein the step of navigating the medical device comprises successively incrementally advancing the guide wire and the medical device.

27. (Twice Amended) [The combination according to claim 24 wherein] In combination with a guide wire having a proximal end, a distal end, and a magnetic distal tip, the magnetic distal tip comprises a plurality of magnets on the distal end section of

the guide wire in spaced apart relation [allowing the guide wire to assume a shape under control of the magnetic field], the portion of the guide wire adjacent the distal end being sufficiently flexible to allow the magnetic tip to move in response to an applied magnetic field, but the proximal section of the guide wire being sufficiently stiff to advance a medical device through a lumen in the body, a medical device having proximal end, a distal end, and a lumen extending substantially to the distal end of the device, the guide wire extending into the lumen of the medical device with the magnetic distal tip in the distal end of the lumen in the medical device.

30. (Amended) The combination according to claim [24] 26 wherein the lumen of the medical device has a stricture therein for engaging the guide wire and retaining the guide wire in the lumen of the medical device.

34. (Thrice Amended) [The method according to claim 31 wherein] A method of navigating a medical device through a body lumen to a desired location within the body, the method comprising:

providing a medical device having a proximal end, a distal end, and a lumen extending to substantially the distal end of the medical device;

inserting a guide wire having proximal end and a magnetic distal tip into the lumen until the magnetic tip is substantially adjacent the distal end of the medical device, the magnetic tip of the guide wire comprises a plurality of magnets secured on the distal end section of the guide wire in spaced apart relation [allowing the guide wire to assume a shape under control of the magnetic field];

inserting the medical device and guide wire into a lumen in the body;

navigating the medical device through the lumen in the body by applying a magnetic field to orient the magnetic tip inside the lumen of the medical device so that the distal end of the medical device is oriented in the desired direction of travel; and

advancing the guide wire and medical device in the direction in which the distal end of the medical device is oriented.

35. (Twice Amended) The method according to claim [31] 34 wherein the magnetic tip comprises a permeable magnetic material.

36. (Twice Amended) The method according to claim [31] 34 wherein the magnetic tip comprises a permanent magnetic material.

37. (Amended) The method according to claim [31] 34, wherein the step of navigating the medical device comprises successively orienting and advancing the guide wire and medical device.